

Thomas A. Edison Laboratories, Building No. 5
(Thomas A. Edison Laboratories,
Main Building)
Main Street and Lakeside Avenue
West Orange
Essex County
New Jersey

HAER No. NJ-70-C

HAER
NJ,
7-ORAW
4-C-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, DC 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

THOMAS A. EDISON LABORATORIES, BUILDING NO. 5
(Thomas A. Edison Laboratories, Main Building)
(HAER NJ-70-C)

HAER
NJ,
7-ORAW,
4-C-

Location: Main Street and Lakeside Avenue, West Orange,
Essex County, New Jersey

Date of
Construction: 1887

Present Owner: National Park Service

Present Use: Museum

Historical Information: The illustrations for HAER No. NJ-70-C-1 through
NJ-70-C-58 show the belt-drive machine shop and
its associated stock room on the first floor of
Building No. 5. The machine shop was erected
with the main laboratory building in 1887 and the
machines in place in the photographs date largely
from 1887 and the early 1890s. All are general
purpose machine tools which were bought from
regular suppliers of such machine tools in
America. Drive shafts located along each side
wall of the room drive the machinery with belts.
Steam engines located in Building No. 6
originally powered the drive shafts, but in 1904
Edison replaced the steam engines with new
equipment. This consisted of two large
40-horsepower direct-current electric motors, one
to drive each shaft. These remain in place,
operable, and power the tools during
demonstrations. An overhead crane, also
operable, runs down the center of the first floor
shop.

NJ-70-C-59 through NJ-70-C-64 illustrate the
second floor machine shop, which was outfitted
after the first floor, but before the turn of the
century. All machine tools are standard lathes,
drills, shapers, etc. Power to the machine tools
was provided by overhead shafts and belts. As
opposed to the first floor shop, the second floor
does not resemble its organization or equipment
during the Edison era. During World War II the
Army used the shop to train machinists and
commandeered it for war production. Machines
were moved and shafts removed. The area was and
continues to be used for general museum and
storage, as well as for a work area.

NJ-70-C-65 through NJ-70-C-93 show the third floor of the Building No. 5, the Main Building. The Main Building at the Edison West Orange Laboratory is a puzzle of difficult proportions. The space was used for a variety of purposes during Edison's lifetime and was used extensively during World War II for war production and training. During the 1930s and especially after World War II, the Edison company moved historical materials from the various company buildings in West Orange and other locations to the laboratory for storage. Most of this material ended up on the third floor. Original patterns of use thus became obscured and difficult to trace. The activities conducted there included phonograph research and experiment, drafting, accounting, general office, and other uses. One of the few historically documentable and partially preserved areas is the "Music Room" (seen in NJ-70-C-66, NJ-70-C-70, NJ-70-C-84, NJ-70-C-85, and NJ-70-C-86). During the period of World War I and the early 1920s this room was used to try out various music and recording artists for the Edison Phonograph Division.

Source: Written documentation by Dr. Edward Jay Pershey, Tsongas Industrial History Center, Lowell, Massachusetts, September 9, 1988.

Historian: Robert Buerglener, HABS/HAER, September, 1988.

It is understood that access to this material rests on the condition that should any of it be used in any form or by any means, the author of such material and the Historic American Buildings Survey of the National Park Service at all times be given proper credit.